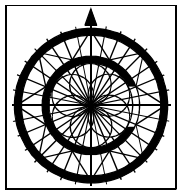

CHEMONICS INTERNATIONAL INC.

# REPORT TO CHEMONICS ON THE DOMINICAN REPUBLIC COMPETITIVENESS AND POLICY PROGRAM (CPP)

Domincan Republic Competitiveness Initiative Component B

Contract No. 517-C-00-03-00110-00

Submitted by Juan J. Buttari, Ph.D.

Submitted to:
USAID/Santo Domingo

Submitted by:
Chemonics International Inc.

## CONTENTS

# Dominican Republic Competitiveness and Policy Program (CPP)

This report is intended to help Chemonics establish a monitoring and evaluation system for its CPP program in the Dominican Republic. The report starts with a background section on concepts, frequently used relevant indicators and guidance. It then moves on to the main section dealing with the recommended indicators and related procedures.

## Background: Performance Indicators of Competitiveness and Trade Capacity Building Projects

"Competitiveness" and "trade capacity building" are terms that mean different things to different people. Moreover, they are broad to the point of vagueness, malleable, overlapping to a considerable extent and at a practical level, do not entail really novel activities. A result is that much of the literature and development practice on the subject present a scattered and differing range of visions, associated goals and measures.

Expanding on the differences and interpretations of competitiveness and trade capacity building is outside the scope of the present report. Nonetheless, a passing reference to the related conceptual lay of the land does help understand the variety of interventions of USAID and other development organizations in these areas. After a quick review of the concepts' foundations the following paragraphs present a summary of some of the result indicators used in competitiveness and trade capacity building activities and end with some guidelines for performance monitoring and evaluation.

According to the modern popularizer of the competitiveness concept used by development organizations, productivity which involves a relation between outputs and inputs is the only meaningful definition of competitiveness (Michael Porter, *The Competitive Advantage of Nations*, Free Press, 1990, page 6). Nonetheless, much of Porter's work deals with industries or sectors and their success is frequently measured by market share. The juxtaposition of productivity and market share as "indicators" of competitiveness has led to the use of diverse measurements that purport to track or measure competitiveness: sales and market penetration, exports, number of transactions facilitated by a project, commercial links made possible by the intervention of a development institution, changes in the living standards of people residing in a given place, and so on.

Another not quite precise term in the competitiveness literature is "cluster". For instance, the Competitiveness Institute distinguishes among industrial clusters, regional clusters, industrial districts, and business networks. All of these terms have in common a sense of interaction among firms and this commonality has provided grounds to brand as cluster creation any activity that involves the promotion of inter-firm linkages. And this is another reason why the facilitation of such linkages is sometimes used as a results indicator in competitiveness projects.

As for trade capacity building interventions for development just review the definition accepted by the United States Government. It refers to assistance "… provided to build the physical, human, and institutional capacity of these [developing] countries to participate in and benefit

more broadly from rules-based trade. The effective trading capability of an economy has many dimensions that overlap extensively with the broad needs of economic development." (2001USG TCB Survey Report)

Indeed. For example, assistance that promotes a legal, judicial and regulatory environment conducive to the efficient allocation of resources and the institutions that are the foundations for wealth-creating markets are trade capacity building activities. As such many of the traditional programs that USAID and other international and bilateral agencies have been supporting for decades can be considered as building trade capacity. They just were known by other names.

A consequence of the breadth of the definitions of competitiveness and trade capacity building is that frequently USAID Missions relabel quite traditional and diverse activities as "competitive or trade capacity building". While there is really no harm in doing so, not surprisingly the indicators used to monitor results and programs in "competitiveness and trade capacity building programs" encompass a wide variety of measures.

**An overview of some of the indicators used (or proposed)**

*Potential TCB Indicators and Comments* (some of these items overlap, the objective however is to show examples of measures suggested or used as indicators).

- *Absolute dollar amount of exports to the U.S.* The advantage is that it directly relates to trade, is easy to track and is of general interest to the USG. The disadvantage is that it is very difficult to separate what can be attributable to USAID.

- *Absolute dollar amounts of exports to other countries in a region (or the world).* Advantages and disadvantages same as for the previous indicator. Another disadvantage is that some countries do not sufficiently disaggregate their exports or there is a significant lag in the publication of relevant data.

- *Compliance with WTO agreements and procedures*. Advantage is that it should be relatively easy to track once "noncompliance gaps" are identified. This indicator requires setting milestones directly related to USAID activities. A potential disadvantage is that very frequently other donors are involved in this area with USAID playing a secondary role. Accordingly it may be hard to separate what is attributable to USAID.

- *Improved sanitary and phytosanitary standards and food safety inspection capabilities*. An advantage is that it is clearly related to modern international trade requirements. A disadvantage is that, in some countries, it may be hard to achieve short-term progress in this area.

- *Pest risk assessments initiated or completed*. Advantage: clearly related to trade facilitation. Disadvantage same as above.

- *Number of harmonized customs policies developed*. The advantage is that it is an important factor in international trade facilitation. The disadvantage it that frequently

there will be other donors involved in the activity (as with WTO compliance) and it may be hard to separate the USAID product.

- *Average customs clearance time*. Closely related to the previous indicator. Same comments apply.

- *Number of new buyer-seller links established*. Advantage: clearly a dimension of international trade. Disadvantage: It may be hard to establish whether a worthwhile link would not have taken place in the absence of USAID. Also establishing a link could be seen as an input. It does not say anything about resulting additional transactions. Note that this indicator is also frequently mentioned in "competitiveness" programs.

- *Average export transaction costs*. For example, how much does it cost to transport merchandise to port of exit. Advantage: Clearly a trade facilitator. Disadvantage: Obtaining needed information may be laborious. Note that this is also an indicator of "competitiveness."

- *Increased volume of traffic in selected ports*. Generally this will be related to decreased costs in the operations of ports. Advantage is that it is clearly a trade facilitator. The disadvantage is that it may require difficult analysis and disentangling the contributions of major development organizations. Again, clearly also an indicator of competitiveness.

- *Number of jobs created*. Advantage: it is an appealing measure to the USG as a proxy for rising standards of living among the poor. Disadvantage: it is an indirect result of trade increase and is not the main goal of development or trade activities. Such goal is the creation of wealth. It may be also tricky to measure reliably. Also frequently mentioned in the context of competitiveness activities.

**Indicators proposed or used in competitiveness-type programs**

As noted in the previous section many indicators used in trade capacity building activities perform double duty in the sense of also being used as competitiveness indicators. The following subsection presents a few additional "competitiveness" indicators and the example of the indicators used by a USAID-partner country (Malawi).

- *Number of business linkages*. Note that this indicator may refer to buyer-seller links (as above) or, alternatively, as links between businesses producing the same product or services for marketing purposes or joint action of benefit to their industry. Same comments as in buyer-seller links apply.

- *Number of obstacles to making business removed*. Advantage: Important as a facilitator of market driven business activities. May include any activity relating to enhancing the legal, judicial and regulatory environment. Disadvantages: Attribution could be an issue (although a manageable one).

- *Number of visits to a USAID facilitated website or portal for marketing or business links purposes*. Advantage: potential facilitator of business activities. Disadvantage: Does not say anything about actual results.

- *Number of transactions completed*. Advantage: An indicator of enhanced commercial activities. Disadvantage: Says little about significance of the transactions and could present an attributions issue.

- *Jobs created*. See comments above.

- *Partnerships (in the cluster sense) facilitated*. Advantage: May facilitate business activities and fits squarely with conventional terminology of current approaches to "competitiveness". Disadvantages: So what?

- *Increase sales or exports*. See above comments on exports. An additional disadvantage is potential reluctance of firms to provide sales information.

- *Increased incomes*. Advantage: It is directly related to the development objective of reducing poverty. Disadvantage: Incomes data are usually hard to get.

**Low-income country program example where the strategic objective is sustainable increases in rural incomes**

Note that the strategic objective above is similar to the Dominican Republic Strategic Objective 8: Increased sustainable economic opportunities for the poor. Also note that the first intermediate result is consistent with relating or equating competitiveness with productivity.

Intermediate result: Agricultural productivity increased

Indicators: (a) Value of agricultural products marketed by farmers' associations
(b) Average price paid for fertilizer by farmers

Sub-IR indicators:

(1) Membership in farmers' associations
(2) Tonnage of agricultural products marketed through farmers associations
(3) Cumulative number of private sector fertilizer actors that have received training or technical assistance
(4) Quantity of fertilizer imports by private sector

Intermediate result: Employment in agriculturally-linked enterprises increased

Indicators: (a) Number of new jobs created in enterprises receiving USAID-funded training or technical assistance
(b) Total value of loan portfolio (performing) extended to agriculturally-linked enterprises

Sub-IR indicators:

(1) Cumulative number of entrepreneurs that receive training in business development skills
(2) Average wage rate of new jobs created with USAID-funded training or technical assistance
(3) Cumulative number of loans by USAID-financed micro-finance intermediaries
(4) Aggregate loan default rate reported by USAID-financed micro-finance intermediaries

Intermediate result: Household revenue from community based natural resource management activities (CBNRM) increased

Indicators: (a) Total revenues households receive from participation in community based natural resources management activities
(b) Number of communities adopting natural resources management activities.

Sub-IR indicators:

(1) Number of households participating in CBNRM activities
(2) Number of community members trained in CBNRM

In conclusion, given that present competitiveness and trade capacity building programs are by and large variations of activities of time-honored interventions this report will argue that best practices in PMP monitoring such programs are no different than the ones traditionally recommended and applied by USAID and other development organizations. Guidelines for such practices can be found in USAID Automated Directives Series (ADS) 203, "Functional Series 200, Programming Policy" revision of March 19, 2004.

**Selected guidelines**

The ADS 203 guidelines below are especially relevant to the present Competitiveness and Policy Program (PCC) in the Dominican Republic and are worth highlighting (most of the text paraphrases the Directives):

- Early start in the planning of performance management is important because assembling such system takes time. Doing preliminary work toward the development of PMP the operating units may discover that they need additional time for revisions.

- Use only information directly useful for performance management. More information is not necessarily better. In most cases no more than two or three indicators per result (at the Strategic Objective or Intermediate Result levels) suffice.

- For the sake of transparency reporting should be candid. Operationally this means:
  - Communicate any limitations in data quality so that achievements can be honestly assessed.
  - Make clear the problems that impede progress and indicate the steps being taken to address them.
  - "Avoid the appearance of claiming jointly achieved results as solely USAID results."

- When PMP costs appear prohibitive one alternative that can be considered is rapid lower-cost assessments to measure performance.

- There is no standard format for PMPs.

- Performance indicators may be quantitative or qualitative. The conclusions of panels of experts can be used in certain instances (for example, when assessing the efficacy of achieving the goal of "civil society organizations improved"). Nonetheless, there is a preference for quantification on the grounds that this is likely to reduce subjectivity. The ADS suggests rating scales as one means of quantifying qualitative assessments. (However, the view of the present report is that it is not clear whether this really reduces subjectivity or just conveys it in a different format.)

- When choosing performance indicators one should consider questions such as: What will be different as a result of the activities undertaken? How will one be able to recognize the desired difference? What will be different at the end of the current year?

- Intended programs should drive the selection of indicators, not the other way around.

- Good indicators usually meet the following criteria: (a) They are direct (meaning that they track the results they are intended to measure – for example, if one is tracking incomes then the direct indicator would be incomes). Nonetheless, if the use of direct indicators is not possible (too high a cost, for example), indirect or proxy indicators can be used – for instance, housing improvements might be an indicator of higher incomes.

- The indicators should be "practical" in the sense that they can be collected at reasonable cost and in timely fashion.

- Indicators should measure results attributable, at least in part, to USAID efforts. "One way to assess attribution is to ask, 'If there had been no USAID activity, would the measured change have been different?' "

- The ADS shows a preference for quarterly indicators but allows for exceptions based on data limitations.

- Baseline values should be collected using the same data collection process to be used in collecting actual performance data. While baseline data can be collected after the start of SO activities, the Operating Unit should indicate when and how the baseline data will be collected.

- "Operating Units may change, add, or drop performance indicators based on a compelling reason." Clearly frequent changes of the indicators weaken the usefulness of the PMP exercise. Changes should be reported and explained. In cases where the changes are deemed significant a special process of review and approval with the appropriate Bureau must take place.

## Recommended indicators

The main indicators discussed below are summarized on Table 1, page 19. As there will be a lag between program activities and results it is relevant to take into account intermediate indicators of progress whose nature will depend on the activities undertaken. As discussed in annex 2, when the activity consists in technical assistance or training, survey methods to assess the impact on skills and tracer analysis to check on implementation of what has been learned are recommended. Other intermediate indicators of progress are milestones; they are suggested particularly in connection with policy reforms and special trade capacity building activities. Not much more will be said on them at this time.

### 1. Tourism Cluster

*Indicators*:

1) Jobs and labor income attributable to the project

Nature of indicator, collection, reporting and targets

These indicators refer to two sources of jobs and incomes. The first one is **jobs and incomes enhanced as a result of artisan training** through CPP. The beneficiaries to be counted are poor artisans who are presently producing low quality products. These artisans would be trained to produce higher quality products and linked to well-established artisan shops already selling to higher-income tourism and other clients.

The definition of "job enhancement" would be measured by whether the beneficiary is selling higher-quality products, or selling mainly to foreign tourists (the assumption is that previously they were not), or whether they are employed by an artisan craft shop selling high-quality products. Income refers to income resulting from work in the production of artisan craft.

*Collection and reporting*: The data would be collected through surveys of representative beneficiaries by project staff on a semi-annual basis and reported semi-annually for "job enhancement" and annually for incomes.[1]

*Target*: This report suggests a "jobs" target of job enhancement of 20 percent annually (i.e., each year 20 percent of the universe of artisans previously producing low-quality craft would see their employment situation changed in the sense defined above). For "incomes" the target would be an increase in annual incomes of 5 percent or more – that is, after benefiting from the project intervention the level of incomes of the artisans would be at least 5 percent higher.

*Control*: For control or comparison purposes the project could use the job status of artisans who did not benefit from project services. This information would be based on the assessment of expert personnel. For incomes the comparator or control source would be the annual increase in the incomes of self-employed workers as reported by the Central Bank through its semi-annual labor market surveys. Another comparator would be the annual increase in real GDP per capita (rate and absolute change).

[1] See annex # 1 for the suggested questionnaire and instructions for obtaining baseline data.

The *second* source of jobs and incomes are the **jobs resulting from the addition of hotel rooms** made possible by cluster activities – naturally the addition of hotel rooms would include rooms in smaller hotel facilities.

*How to estimate*: Typically each new room added would give rise to 0.9 direct jobs in the hotel industry.[2] As total indirect jobs in tourism are three times the number of direct jobs in hotels, by multiplying 0.9 times 4 one would get the total jobs generated in tourism out of an additional hotel room. For example, one additional room would give rise to a total of 3.6 jobs of which 0.9 are direct and 2.7 are indirect.

One can also estimate additional induced jobs by applying the following rationale: while value added in tourism represents some 9 percent of GDP, through its multiplier or induced effects it gives rise to some 25 percent of GDP. Hence the ratio of total GDP thanks to tourism to GDP in tourism is approximately 2.7 (this ratio is used by the Central Bank of the D.R. and is based on input-output methods). It is plausible to think that the same relation that holds between total GDP thanks to tourism and GDP in tourism holds for employment.

Accordingly, once one has total employment in tourism one can multiply such number by a factor of 2.7 to estimate total jobs thanks to tourism. Thus once one has the 3.6 jobs in tourism by multiplying by 2.7 one gets some total 9.7 jobs generated by the addition of a hotel room. The 9.7 jobs may be broken down as 0.9 jobs in the hotel industry, 2.7 (indirect) jobs in the rest of the tourism industry, and 6.1 induced jobs in other sectors. Such calculation assumes normal occupancy and demand levels (by hoteliers, tourists, rest of tourism, and other industries).

*Collection*: Information on additional rooms would be collected by project staff from the Asociación de Hoteles y Restaurantes Inc. (ASONAHORES), the Central Bank, or cluster leaders. Note that the Central Bank publishes statistics on direct and indirect employment in tourism from surveys carried out every 6 months.

*Wage bill, how to estimate*: Once one has estimates of additional jobs created one can estimate resulting wage bill increases by multiplying the new jobs by average wages. Data on wages are collected twice a year by the Central Bank. ASONAHORES also reports such wages for the tourism industry. While there is a lag between data collection and publication the project could do either of three things to report current wage data: (1) it might make arrangements with the Central Bank and/or ASONAHORES so that the information is provided to the project prior to publication; (2) it might use the most recent published data available adjusting it by a factor obtained from the hotel associations in the cluster; or (3) it might adjust the most recent published data by an estimate for inflation on the assumption that wages will tend to adjust by the same proportion.

[2] The material in this paragraph is based on information provided by the Central Bank of the Dominican Republic.

*Reporting and target*: This report suggests that data on jobs added and wage bill increases thanks to project facilitation be reported on an annual basis.[3] Moreover, this report suggests a target of 2 percent annual growth in jobs and incomes due to project facilitation starting two years from now (baseline would be zero).

2) Sales (tourism receipts) attributable to the project

Nature of indicator, collection, reporting and targets

This indicator refers to increase in tourism receipts due to activities directly related to the project. Among others, such activities would include those recommended by Ernst & Young for the tourism clusters. Data on tourist sales are collected and reported by the Central Bank and ASONAHORES. Project staff would track such data and report it annually. This report suggests a target of 2 percent annual increase above trend in tourism receipts due to project activities starting two years from now.

Total receipts from tourism in 2003 amounted to US$3,110.4 million, the baseline. For forecasting use the following equation:

Total receipts from tourism = -262566.9+132.5007 Year. Receipts will be in US$ million. Equation was obtained from fitting Central Bank data for the period 1980 to 2003. (The annual compound rate of growth of total receipts amounted to some 10.7 percent from 1980 to 2003.)

Another reference point is that in year 2003 tourists spent an average of US$101.27 per day. In 1993 the per-day expenditure was US$ 88.15. This gives an annual compound rate of growth of 1.4 percent. Both the 2003 expenditure per day and the rate of growth could be baseline figures if project activities were oriented to attract tourists who tend to spend more.

### 2. Agriculture Cluster[4]

Nature of indicator, collection, reporting and targets by subsector

**Mangoes**

Indicators:

(1) Volume of mango boxes exported, attributable to the project, by exporters served by the project.
(2) Reduction, attributable to the project, in percent rejects from bruising – volume and value. Again this will be from packers served by the project.
(3) Reduction attributable to the project in packing labor costs -- packers served by the project.

[3] Note that while the project should report separately artisan income enhanced as a result of project activities it would not be appropriate to add such artisan income increases to the total wage increases made possible by the addition of new hotel rooms as such addition would probably involve double counting.
[4] See annex # 2 for a synopsis of indicators discussed with project technical staff.

*Collection, targets, and reporting*: Collection of data would be done by specialized project staff. The data would be obtained through surveys of growers and packers whose information is deemed reliable by project staff. Baseline is being obtained as this report is written. Annual targets of 4 percent growth in exports (above trend or historical annual compound growth rate) and 2 percent in reduction in rejects and costs sound reasonable at first blush. Reporting would be done on an annual basis by project technical staff.

*Control*: At least two potential control sources. One is extrapolations of trend or compound growth rate. The other is best assessment by expert opinion (technical staff from the ministry of agriculture, for example) on how producers and growers not benefiting from the project have done.

**Oriental Vegetables**

Indicator:

(1) Value of exports, attributable to the project, from exporters/growers served by the project.

Please note that on the basis of technical assistance already provided by the project, and even if no further assistance were delivered in the oriental vegetables and mango subsectors, the project can report estimated savings for the next two years between US$800,000 and US$1,100,000 from post harvest and packing house design recommendations relating to oriental vegetables, and guidance for complying with the Bioterrorism Act.[5] These benefits should be added to those resulting from other ongoing or additional project interventions in oriental vegetables and mangoes. Details on the interventions can be found in Juan José Aracena and Marsha Krigsvold, *Situacion del Nivel Tecnólogico de las Empacadoras de Vegetales Orientales de la Vega*, August 2004.

*Collection, targets, and reporting*: Baseline is being obtained as this report is written. Collection of information to be done by specialized project staff from selected growers and exporters working with the project. Annual target of 4 percent growth in exports (above trend or annual compound growth rate) is suggested for consideration. Reporting would be done on an annual basis by project staff.

*Control*: As with mangoes.

**Specialty Coffee**

At the time this report was prepared there were many doubts as to how far the project would go into specialty coffee. A very time-limited intervention seemed the most likely participation. If that were the case the proposed indicator is “cluster creation and strengthening as measured by the number of inter-institutional or cluster component alliances achieved.” For the launching (and any additional) meeting one could measure how much the participants got out of the

[5] See annex # 3 for the methodology used for these estimates.

meeting through questionnaires and one follow-up activity to check on practical applications. Reporting would be done by technical staff.

**Trade Capacity Building**

Indicators, data collection, reporting and targets:

(1) *Education in the level of World Trade Organization (WTO) notification failures by the Dominican Republic*. This would be implemented by determining the existing gap or arrears in notification, setting the goal of closing such gap by the last project year, and establishing semi-annual milestones that signal progress in the correction of the failure gap.

(The issue is that the Dominican Republic is significantly behind in the number of notifications it must make to comply with WTO procedures. Such notifications consist in communications member countries must make to the WTO regarding measures affecting the areas of WTO agreements and procedures. The measures relate to actions of the subject country or other member countries to which the subject country should react.) Data would be collected by project staff from information provided by the World Trade Organization and reported by the same staff on a semi-annual basis. The target would be having closed the notification gap by the end of the project. Semi-annual milestones would be set to such end. Baseline gap is being determined at the time of this writing.

(2) *Improvement in customs procedures or similar specific results that can be directly partially or totally attributed to the project intervention.* For example, other potential indicator in this area might consist in linkages with businesses overseas made possible by technical assistance or information facilitated by the project and the results of technical assistance for the improvement of trade related infrastructure development.

Depending on the indicator chosen the project might want to use milestones (e.g., reduction in time required to process goods through customs or number of linkages or transactions completed thanks to the project). Data collection and reporting would be done by specialized subcontractors (for example customs procedures experts contracted by the project). It is suggested that reporting be done on a semi-annual basis.

(3) *Exports to and imports from the United States plus foreign direct investment*. These are to be used as context indicators. Data on such exports and imports would be obtained by project staff from the US International Trade Commission website and reported by the staff on a semi-annual basis (these data appear with a lag of two months). Data on foreign direct investment would be obtained by project staff from balance of payments statistics published by the Central Bank. Comparison with trend extrapolations would provide a sense of how well the country is doing in terms trade capacity.

*Baseline data*: Exports to US in year 2003 were US$4558 million cif (cost, insurance and freight) values; imports from the US year 2003 were US$ 4214 million fas values(free alongside ship, ie value of exports at the US port, do not include cost of loading or further costs). These figures were obtained from the US International Trade Commission website. For forecasting

trends use the following equations: (a) for exports to the US, exports= -610351+307.3824 Year; for imports from the US, Imports= -459597.5+231.8571 Year. Values are in US$ millions. Equations were estimated using annual data starting from year 1989. Foreign direct investment in year 2003 (baseline) was US$309.9 million – this figure is lower than any during the 5 preceding years and was taken from the Dominican Republic Central Bank website.

**Policy Reform**

Potential policies will be determined by early October. The policies will be discrete measures that fall within the scope of activities of USAID/Chemonics' competitive initiative. Examples are: (a) support for the establishment of a standards and classification code for agricultural products; (b) technical assistance to strengthen the integrated pest management program; and, (c) technical assistance for launching a Tourism Development Fund that guarantees revenue bonds issued by hotel developers to promote tourism in the country. This program could be similar to the one implemented in Puerto Rico in the 1990s and would be subject to approval by local tourism authorities (see Ernst & Young's Competitive Strategy Reports for the clusters).

**A Note on Evaluation**

This report suggests an evaluation of CPP during the six last months of the program's life as presently contemplated. Its purpose would be to assess the effectiveness of the specific activities undertaken in the project, the validity of the conceptual framework that formed the basis for the program (the particular approach to competitiveness), the usefulness of the monitoring efforts, the validity of assumptions and the impact of external factors and, in sum, lessons learned relevant for future activities. Given the nature of the program, its relative short life at this point, and its thrust in changing cultural patterns (or mindsets) an earlier evaluation would be premature.

The main responsibility for the evaluation would lie with an external contractor who, nonetheless, would work in collaboration with selected staff from USAID, Chemonics, and other program partners. Subject to budget constraints, data collection and analysis would rely on survey sampling methods, meetings with focus groups, and an ex-post economic assessment of costs and benefits. If resource constraints are deemed too limited for the application of these methods, the evaluation would have to rely mainly on contacts with focus groups, key informant interviews and targeted rapid appraisal techniques to answer narrower management questions.

The scope of work for the evaluation would identify the key questions and specific issues that the program managers would like to see addressed. Besides the dependence on budget resources, such questions and issues to a considerable extent depend on program activities during the remaining program life.

Ideally the external contractors in the evaluation team would include experts in agriculture, tourism, survey methods and development economics. These individuals would be complemented by selected program staff and partner representatives.

The evaluation team would brief all parties involved in the CPP program on its conclusions. It would also prepare a written report that explains the key issues and questions addressed, the methodology used, the findings or facts uncovered by the evaluators, the conclusions or assessments of the evaluators based on the findings, and the lessons learned with an emphasis on what should be replicated or changed in future similar activities.

**Table 1. Summary of Indicators Proposed and Related Comments**

| Area | Indicator | Comments |
|---|---|---|
| **Tourism** | | |
| | Number of artisan jobs enhanced | Baseline being determined |
| | Artisan incomes increased | |
| | Number of jobs resulting from the addition of hotel rooms | Baseline is zero |
| | Increase wage bill resulting from the addition of hotel rooms | Baseline is zero |
| | Increase in tourism receipts | Baseline is receipts in year 2003. They amounted to US$3,114 million. For trend see text. |
| **Agriculture** | | |
| **Mangoes** | Volume of boxes exported | Baseline being determined |
| | Reduction in rejects | |
| | Reduction in packing costs | |
| **Oriental vegetables** | Value of exports | Baseline being determined |
| **Specialty coffee** | # of alliances achieved | Baseline is zero |
| **Trade Capacity Building** | Reduction in the number of WTO notification failures | Baseline being determined |
| | Others to be determined | Potential candidates include improvement in customs procedures and linkages with businesses overseas. Exports and imports to/from the US plus foreign direct investment suggested as context indicators. |
| **Policy Reform** | To be determined | Potential candidates include establishment/enhancement of |

| Area | Indicator | Comments |
|---|---|---|
| | | a standards and classification code for agricultural produce, strengthening of pest management program and a Tourism Development Fund |

# ANNEXES

## ANNEX 1

# Guidance to Persons Managing the Collection of Information (Artisan Module)

1. The survey instrument in pages 23 through 25 of this document is meant to aid in the collection of baseline data regarding the income and job situation of artisans. In previous communications incomes and job situation were identified as two indicators which the project would monitor to track impact.

2. Given time constraints it is not possible at this point to develop a scientific survey.

3. Accordingly for each regional-tourism cluster, the idea is to identify a core of artisans who are among the potential beneficiaries of training and job enhancement through the clusters and gather the information from them. The artisans interviewed would be taken as representative of the universe of artisans who could benefit from the project activities.

4. The project should identify cluster leaders (or persons who may play that role) and through them identify the persons who would be interviewed.

5. Ideally someone such as Mr Jose DeFerrari would act as liaison between the project and the cluster leaders and provide guidance as needed.

6. The number of persons interviewed in each cluster does not have to be big. Probably sets of 5 to 10 persons would do. If it is not possible to identify or convene such persons for applying the questionnaire, the information should be collected from a person knowledgeable of the conditions in the area. Such person would be asked to supply answers to the questions to the best of his/her ability (for example, he/she could provide a sense of the average income derived from artisans producing at the low-end of the quality range, type of customers, age, gender, and family status of the artisans, etc.).

7. When a group of artisans is convened to obtain the baseline information, the person guiding the sessions should explain that the information is confidential and intended to design activities to help artisans in the region such as them improve their income status through training, facilitating linkages with well established artisan craft establishments and tourists. A brief and clear overview of the clusters' purposes and the Competitiveness project should also be provided.

8. As some of the artisans may have literacy deficiencies the person/s carrying out the survey may want to do one-on-one interviews, read the questions and obtain oral answers that he/she would mark on the questionnaire pages. Each question and answer session should not last more than 10 minutes.

9. After the information is collected from all possible regional clusters it should be reported to USAID in terms of average income from artisan work and job status (self-employed or not) as the main variables that would be tracked. The other information (gender and age distribution, clienteles, etc.) would be also reported for context purposes and as part of the baseline exercise.

10. Page 26 of the document elaborates on the rationale for the questions.

11. Finally, the questionnaire and explanations have been done using a Word processor not meant for documents in Spanish. Accordingly, some Spanish punctuation marks (the initial question mark being one case) may be missing. Project staff in the Dominican Republic should go over the questionnaire and make any corrections deemed necessary.

## Encuesta Informal para Trabajadores Artesanales

1) Fecha _____

2) Sitio, región o comarca en que se lleva a cabo la entrevista _____

3) **Favor darnos estos datos personales marcando la casilla apropiada**:

¿Jefe de familia?

Sí___

No___

¿En caso afirmativo es usted la principal fuente de ingreso de su familia?

Sí__ No____

¿Cuántas personas dependen de sus ingresos?

Sólo usted ____

De dos a cuatro personas ____

Más de cuatro personas _____

Sexo: Masculino ____ Femenino___

Edad: Menos de 20 años ____

Entre 20 y 40 años ____

Más de 40 pero menos de 60 años ____

60 años o más _____

**Favor bríndenos la información siguiente marcando la casilla apropiada o contestando la pregunta**.

4) ¿Qué proporción de su ingreso proviene de ventas de su trabajo artesanal?

¿Todo? _____

¿Mas de la mitad pero menos del total? _____

¿Aproximadamente la mitad? _____

¿Mucho menos de la mitad? _____

5) ¿Aproximadamente y en general cuánto gana usted por concepto de ventas de productos artesanales?

¿Unos 74 pesos diarios? ____

Mucho menos___ Menos___ Más o menos eso___ Más de eso___

Si es más de esta cantidad, ¿puede indicárnosla?

6) ¿Cuántos días a la semana trabaja usted en la producción o venta de productos artesanales?

¿ Cuántas horas al día? _____

7) ¿Quienes son los principales compradores de sus productos de artesanía?

Turistas dominicanos _____

Turistas extranjeros _____

Otros dominicanos _____

Tiendas o locales comerciales establecidos ____

8) ¿Estaría dispuesto/a a dedicarle tiempo a recibir entrenamiento que le permitiese producir y vender productos más elaborados y con ello posiblemente aumentar sus ingresos?

Sí___ No____

**Notas Explicativas**

Los renglones (1) y (2) sirven para identificar al grupo de personas entrevistadas (por ejemplo, grupo del 1ro de octubre de 2004, Punta Cana)

El bloque (3) provee información para determinar el grado de responsabilidad familiar (si es jefe de familia y de ingresos muy bajos la familia es muy pobre), la distribución por sexo del grupo, así como la distribución por edad.

La pregunta (4) tiene como objetivo determinar la importancia del trabajo artesanal como fuente de ingresos para la persona en cuestión.

La pregunta (5) está orientada a determinar el grado de pobreza de la persona. Note que 74 pesos (dólares) dominicanos diarios equivale a un ingreso anual de unos US600 anuales si se trabaja 6 días a la semana.

La pregunta (6) sirve para medir el grado de dependencia de la persona de sus tareas artesanales, su productividad aproximada y a la vez es un modo de corroborar la importancia de la información brindada en la pregunta (4). Si una persona trabaja muy poco en artesanía probablemente no es de extrañar que gane poco de tal faena. Si trabaja mucho y gana poco ello indica que, según el mercado, el valor de su producción es bajo.

La pregunta (7) está orientada a determinar si la persona tiene acceso o no a clientes dispuestos a gastar más en artesanías.

Conjuntamente con las preguntas previas, la pregunta (8) sirve para identificar el subgrupo de personas en quienes se deberían centrar los esfuerzos de entrenamiento o vinculación con artesanos de mayor sofisticación.

## ANNEX 2

# Notes from Meeting with Juan Buttari on PMPS for Agriculture

### La Vega

### 2004 to date

### I. Operational efficiency

### A. Postharvest and packing house design recommendations

1. *Chlorine bath*: annual cost savings for individual p/h, industry
2. *Humidifier*: increased income from reduction of dehydration of tindora for packing house/industry
3. *Conveyor belt packing line*: annual labor cost savings for chilis
4. *Use of electronic balance in packing line*: increased income from reduction of over filling boxes by using electronic balance instead of a large scale balance

### II. Regulatory Compliance

### A. Bioterrorism Act

1. *Industry savings by not being penalized with refusal at port for failure to register food facility with the FDA before December 12, 2003*: 15% boxes (Jan and one half of February 2004) x $16.34 = $234,293 saved by having all packing houses properly registered with the FDA.

### Mango

### I. Operational efficiency

### A. Pruning: TA Long-term indicators (end of year)

1. *Volume of increase in exported boxes*:
   production volume 2004/tarea * tareas pruned of same age trees in terms of # boxes exported/tarea v.
   same measurement in September 2005

2. *Value of increase in exports by value*: change 2004-2005 in boxes exported * average box price = $$ income

## Intermediate indicators

1. *Number of farms and tareas adopting pruning*
2. *Trainer workshops*
   a. *Number of workshops offered in 2004 by trainers PRODEFRUD/IDIAF*
   b. *Change in knowledge level*: two questions. How much did you know about this subject before you took the course? and, How much do you think you learned/know about mango pruning after taking the course? Offer multiple choice answers:
   c. Nada (0%), algo (25%-50%) mucho (75-100%) for both questions.

3. *Two-three months after the pruning training*:
   Follow-up evaluation in Jan/Feb by Dr. Davenport quality of level of pruning used and number farms implementing.

### B. Postharvest diagnostic and packing house design:

1. *Reduction in percent rejects from bruising*: volume and value
2. *Reduction in packing labor costs*: change in time to pack per box in $ (time start-finish)*( cost labor/box)*total number boxes packed for export in season.

### II. Market Study

1. *Number of new buyers from study*
2. *Increase volume shipped to new buyers*
3. *Increase income from new buyer*

### Specialty Coffee

### I. Organizational successes

1. *Launching event*: What participants got out of participation in the event: Nada, algo, much. As above.
2. *Count as a cluster formation*
3. *Number successful team building events*: # of inter-institutional/component alliances made due to the formation of the cluster and associated events

## ANNEX 3

# Ahorros Derivados de las Actividades del Proyecto en Vegetales Orientales

(entregado por Juan J. Aracena)

**14 September 2004**

### La Vega

Ahorro potencial del sector exportador de vegetales y frota de La Vega por una mejora en la eficiencia de las operaciones de las empacadoras. Asume que los 42 exportadores adopten las recomendaciones tecnicas hechas por el proyecto.

| | | |
|---|---|---|
| 1. | Tina de lavado con agua clorinada | US$ 53,631 |
| 2. | Uso de Humidificadores en cuartos fríos | US$ 134,205 |
| 3. | Uso de “Correa móvil en la línea de empaque” | US$ 61,950 |
| 4. | Uso de balanzas electrónicas | US$ 674,791 |
| | **Total de Ahorro Potencial** | US$924,577 |

### Cálculos

**1. Tina de lavado con agua clorinada**

Costo promedio de preparación tina antes de intervención: RD$ 452

Costo promedio de preparaci6n tina despues de intervención: RD$ 120

Ahorro = RD$ 452 - RD$ 120= RD$ 332/ tina

Ahorro total = RD$ 332/ tina x 3 tina/semana x 50 sem/año x 42 export. = RD$ 2,091,600/año

Ahorro total = US$ 53,630.76

**2. Uso de Humidificadores en cuartos fríos**

Numero de cajas de Tindora exportadas en e12003 = 206,469

Peso promedio de 1a caja = 30 1ibras

Precio por caja = US$ 32.5

Precio por 1ibra de tindora = US$ 32.5/30 1ibras= 1.08 US$/libra

Total de libras exportada en e1 2003 = 206,469 cajas x 301ibras/caja = 6,194,070 1ibras

Bajo 1as condiciones de a1macenamiento en La Vega donde los cuartos fríos tienen una humedad re1ativa de 75 % (1o ideal es HR de 90-95%), se estimó una perdida de peso promedio de 2 %.

Pérdida de peso de 1a tindora = 6,194,070 libras x 0.02 = 123,881.4 libras

Ahorro en dó1ares si se instala e1humidificador y se evita la pérdida de peso = 123,881.4 1ibras x 1.08 US$/libra = US$ 134,204.85

**3. Uso de Correa móvil en la línea de empaque**

Horas de trabajo en el empaque antes de la intervención = 13 horas
(Desde las 2:00 pm hasta las 3:00 am) para empacar 400 cajas

Horas de trabajo en el empaque después de la intervención = 5.33 horas
(Desde 1as2:00 pm hasta 1as10:00pm) para empacar 400 cajas

Ahorro de tiempo en el empaque = 13 -5.33 = 7.67 horas/día

7.67 horas/dia x 6 días/semana = 46.02 horas/semana

46.02 horas/semana x 50 semanas/año= 2,301 horas/año

2,301 horas/año x RD$ 25/hora = RD$ 57,525/año.emp

RD$ 57,525/año.emp x 42 empacadores = RD$ 2,416,050/año

RD$ 2,416,050/ 39 RD$/US$ = US$ 61,950/año

**4. Uso de balanzas electrónicas**

Total de cajas exportadas en e12003 = 2,476,299

Peso promedio por caja = 30 1ibras

Precio promedio por caja = US$ 16.34

Precio promedio por libras de producto = US$ 16.34/30 1ibras = US$ 0.545/lb

Un ahorro de 0.5 1ibra por caja equiva1e a US$ 674,791.48/año

(2,476,299 cajas/año x 0.5 lbs/caja x US$ 0.545/1b= US$ 674,791.48/año)

**Nota**: Con el uso de la balanza electrónica el exportador está colocando media libra de producto menos por caja (que 1o acostumbrado) acercándose al límite de tolerancia sin temor a estar poniendo menos producto en 1a caja que lo indicado. Anteriormente, debido al uso de balanzas de baja precisión, el exportador sobrellenaba las cajas para corregir cualquier error de la ba1anza y evitar reclamos de los compradores.